

State of California  
Office of Emergency Services  
Fire and Rescue Branch

**MAINTENANCE BULLETIN #33**

***Subject: Maximum RPM, OES Engines 223 Through 247***

This information has been prepared for your guidance in the operation and maintenance of the Caterpillar 3208T engine installed in OES engines #223 through 247. In these units, the Caterpillar 3208T motor is paired with a Dana (Spicer) 5 speed synchro-mesh manual transmission with a Rockwell Model RS-23-240 2 speed rear axle.

Because of the manual transmission, it is possible to overrev these motors, particularly when going downhill in the higher gear ratios. These motors cannot be run over 2900 RPM or internal damage may occur. Extreme care must be taken by apparatus operators to ensure that engine RPM's be kept within acceptable limits as indicated by the green colored section of the tachometer. Instances of over revving resulting in internal damage will be evaluated on a case-by-case basis by Fire and Rescue Branch personnel. Base on the needle indication on the tattletale tachometer, severe instances of over revving resulting in damage will be deemed a result of negligence or misuse on the part of the assignee, per item #1.b. of the Agreement for Temporary Transfer of Vehicular Equipment. In such instances, the cost of repair may be determined to be the responsibility of the assignee.

The warning label shown below is to be centered on the tachometer lens, or places as close to the center as possible in the case of units equipped with tachometers with a center knob. These labels will be provided by the Fire and Rescue Branch.

